N O V E M B E R 1961



7he
TEACHERS COLLEGE

UNIVERSITY MICROFILMS 313 NORTH FIRST STREET ANN ARBOR, MICH.

JOURNAL



VOLUME XXXIII

Number 2

Indiana State College
Terre Haute, Indiana

Contents...

Editorial — Teacher—Researcher Charles Hardaway	31
The Legal Status of Compulsory School Attendance In Indiana Jack Davidson	32
A Six-Year Study of Teacher Turnover in the Public Schools of Terre Haute, Indiana (1955-1960) Norman L. Darrow	34
Women Characters in George Eliot's Novels Edith I. Jones	35
The Effect of Different Criteria Used by Teachers and Children in Their Judgments of School Performance Dewey J. Moore	38
Abstracts of Master's Theses	42
A Summary of a Study of the Teaching of Oral Interpretation in Michigan, Selected Textbooks and Practices in Extra-Classroom Activities Otis J. Aggertt	46
Philosophical Bases for Physical Education Experience Consistent with the Goal of American Education for High School Girls Eleanor Forsythe	47
Book Reviews	48

The Teachers College Journal seeks to present competent discussions of professional problems in education and toward this end restricts its contributing personnel to those of training and experience in the field. The Journal does not engage in re-publication practice, in belief that previously published material, however creditable, has already been made available to the professional public through its original publication.

Manuscripts concerned with controversial issues are welcome, with the express understanding that all such issues are published without editorial bias or discrimination.

Articles are presented on the authority of their writers, and do not necessarily commit the Journal to points of views so expressed. At all times the Journal reserves the right to refuse publication if in the opinion of the Editorial Board an author has violated standards of professional ethics or journalistic presentation.

the

Teachers College Journal

volume XXXIII . . number 2

Published October, November, December, January, March, and May by Indiana State College, Terre Haute, Indiana. Entered as second-class matter October 5, 1931, at the Post Office at Terre Haute, Indiana, under act of August 24, 1912.

president

RALEIGH W. HOLMSTEDT

editor

CHARLES W. HARDAWAY

assistant to the editor

ROSE MARIE LYNCH

editorial associates

Byron Westfall Richard E. Thursfield Jacob E. Cobb

editorial board

Richard E. Thursfield Richard Lawson Raleigh W. Holmstedt Ex-officio



NOVEMBER COVER

Architect's drawing of men's dormitory now under construction at Indiana State College. The completed facility will consist of four units served by a central hexagonal-shaped kitchen. Unit I (lower right), together with kitchen, will be ready for occupancy by September, 1962. Unit II (lower left) is now in the planning stage. Each unit is nine stories high and will house 300 men. (Courtesy of Office of Information Services).

Teacher-Researcher

Somehow in the development of the profession of education there have evolved two contrasting and apparently distinct groups: namely, the teaching group and the research group. Such a development is indeed difficult to understand, but it is apparent in far too many instances. The teacher, on the one hand, devotes his entire energies to classroom instruction. He assumes that his procedures are sound; that his curricula are in order; and that all is well in his isolated domain.

The researcher, on the other hand, far removed from the classroom and even more isolated, devotes his time and effort studying teaching techniques, evaluating curricula, analyzing psychological theories, and concluding that all is not well within the classrooms. Apparently, "never the twain shall meet."

This dilemma offers little toward bringing about the attainment of improved education—the ultimate goal of both the teacher and the researcher. The teacher is not willing to accept and utilize the findings of the researcher. The researcher is not willing to leave his laboratory or his computing machine in order to conduct his work in a school room or to lend assistance to the teacher in implementing newly developed theories.

According to the proponents of action research, the most effective way to improve educational practice is for those who may have to change the way they now do things to actually engage in research in the class-

room. The teacher has his own laboratory in his schoolroom. If he were proficient in identifying his problems (and incidentally many teachers are unaware that problems actually exist), then he is in an ideal position to attempt solutions. He is able to try new techniques and evaluate them. He is able to experiment with various media and procedures and observe results that are forthcoming. His classroom environment is a research environment. And such an environment does not make the so-called professional researcher obsolete. He is ideally situated to offer unlimited assistance to the research minded teacher. With his knowledge of research design, statistical techniques, and research procedures, he should devote his efforts to helping the classroom teachers conduct creditable studies. When the teacher discovers for himself that there is a "better way," a more effective tool, or a more efficient procedure; then, and only then, is he likely to modify his behavior. The researcher can aid the teacher in this discovery.

In this our November Journal, annually devoted to research, we present summaries of research carried out by teachers (both college and public school.) Their efforts are creditable and should be commended. It is our sincerest hope that teachers generally will become research oriented and carry on research that will improve their proficiency in classrooms everywhere.

Charles Hardaway Editor (Summary of an Advanced Thesis presented to the Faculty of the Education Department, Indiana State Teachers College)

Thesis Committee: Dr. Fred Swalls, chairman; Dr. Charles Hardaway, Dr. Jacob Cobb.

• FOR A NUMBER of years the administrators of the public schools of Indiana have felt the need for a concise compilation of the compulsory attendance laws in effect in the state. Such a study can make available in one volume the current statutes thereby expediting the work of the administrator when dealing with attendance problems. A survey of the chronological development of these attendance laws helps point out how these laws developed into the present day code.

It was the purpose of this study to record this gradual development of compulsory attendance laws and to pull together all pertinent laws currently governing compulsory school attendance in Indiana.

In order to locate the first compulsory attendance laws written in Indiana, the statute books were examined from the year 1873 to the present. Court cases and opinions from the Attorney General were also included. Interviews with attendance officers currently working in the field and the State Attendance Officer produced information concerning the operation of attendance laws today. Information on the child labor laws was secured from the statute books and from the Division of Labor.

The first compulsory school attendance law passed in the nation was listed in Massachusetts in 1852. This required school attendance from the ages of eight to fourteen years. The state of Indiana passed its first law on compulsory school attendance in 1897. This important law prescribed compulsory attendance of all children between the ages of eight and fourteen years. Their attendance was required in a public, private, or parochial school each school year for a period of at least twelve consecutive weeks. Any child who had completed the eighth grade was exempt from the act, however. Truant officers were prescribed in this first law with specific duties to enforce the compulsory attendance.

Through the years the scope of the laws on com-

pulsory school attendance gradually broadened. Paralleled with statutes on compulsory attendance were laws on child labor. The legislature of 1911 passed into law a provision defining in exact terms the types of employment in which children of certain ages could be engaged. In general this act greatly limited the types of suitable occupations for children under fourteen.

Major laws on compulsory school attendance were passed in 1897, 1913, 1921, and 1953. While other legislation has amended or changed the operation of the law, the foregoing laws were basic to the structure of compulsory school attendance and child labor. In the law of 1913 compulsory attendance was required of children who had reached the age of seven years and were not more than fourteen years of age. It also applied to every-child of fourteen years or more and not more than sixteen years of age who was not actually and regularly employed during the school hours. It was in this 1913 law that the work permit was required for the first time. As a result of this law school teachers and administrators were required to keep accurate records of the attendance of all enrolled pupils. A state board of truancy was created by this 1913 act. It consisted of the state superintendent of public instruction. a member of the state board of education, and the secretary of the board of charities. This board could determine the special requirements for attendance officers throughout the state.

The school attendance law of 1921 provided one attendance officer for every two thousand students in average daily attendance. One additional officer could be appointed for every additional ten thousand children of school age. This 1921 law required school attendance of all children between the ages of seven and sixteen.

The 1953 law placed responsibility on the parents to show that a child was receiving adequate instruction at home if he was not attending school. Any parent found guilty of violating the provisions of the act could be fined not to exceed five hundred dollars, to which could be added imprisonment for not more than six months.

The state attendance office today operates basically under the Indiana Acts of 1953, Chapter 249. Our current laws require school attendance of all children, not specifically exempted, who are between the ages of seven and sixteen. Those exempted from this require-

ment are specified as (1) those who are excused by virtue of any other law in the state, but only when such excuse is in operation; (2) a child who is physically or mentally incapacitated from attending school as certified by a properly licensed physician.

When children are not attending school, the parent or guardian must produce to the superintendent or attendance officer a certificate that the child cannot attend school. This certificate must be signed by a physician. Parents are held legally responsible for the enforcement of the compulsory school attendance laws. In reference to attendance officers, current law states that one attendance officer shall serve a district having fifteen hundred pupils in average daily attendance. In addition, one additional attendance officer is allowed for each seven thousand five hundred students in average daily attendance.

The state attendance officer is appointed by the governor for a two year term. This state attendance officer works cooperatively with both the governor and the state superintendent of public instruction. Most of the state attendance officer's problems are solved in association with the state superintendent. The governor has the authority to remove the state attendance officer at any time for cause.

An evaluation of the existing operation of attendance laws in Indiana can best be made by those people working in an effort to obtain personal opinions from attendance officers in the state as to problems encountered, cooperative agencies used, and recommended changes in the existing laws.

Interviews were conducted with attendance officers, representing five cities and five counties of varying sizes. Counties were selected that seemed to typify certain sections of the state.

In addition to these officials, an interview was conducted with the State Attendance Officer in her office in Indianapolis. She is responsible for directing the work of some three hundred twenty attendance officers in the state. Certification is required in the same manner as for teachers. From statistics released by the State Attendance Officer it can be shown that the number of cases being investigated is constantly increasing. At the same time, the number of cases being taken to court is decreasing. It is the opinion of the State Attendance Officer, and others working in the field, that this is the result of locating the cases sooner and using preventative techniques rather than simply treating the case.

From these interviews with attendance officers throughout the state there emerged a definitely new approach to the problem of school attendance. The case

study method is being used in most areas today. Attendance officers, welfare workers, probation officers, social workers, and school officials are working cooperatively on single cases. The emphasis is on early recognition of the potential attendance problem. It is the contention of these workers that these potential problems can be recognized early in the elementary school. Prevention of future problems is the task confronting attendance workers today.

It appears from these interviews with attendance officers that the role of these school workers is changing rapidly. This change has been necessitated by the rapidly growing school population on one hand and by an entirely new approach to the problem of school attendance on the other. Much improvement is being made in the operation of these attendance officers. This is particularly true in the area of problem solving, and applies to case study of individuals by a variety of interested officials.

In the light of the study made and interviews conducted, certain recommendations can be made.

- 1. The first recommendation involves the continuance and expansion of the case study method of problem solving in school attendance and school social situations.
- 2. More workers are needed in the field. Legislation is needed that would allow more workers in the area of attendance. One attendance officer for the first fifteen hundred students in average daily attendance seems workable. More workers are needed after that first figure, however. A more suitable figure might be one officer for each three thousand in ADA after the first allowed attendance officer. With reorganization standards established at one thousand students in average daily attendance, perhaps that figure could be used in computing the number for the first officer and three thousand used after that. However the number is computed, it is very evident that more workers are needed in the field.
- 3. A continued investigation into the possibility of special programs of education for those special students not able to perform in the standard program is recommended. The problems involved in this type of program are numerous and well-known. If the work of attendance officers is to be improved, attention needs to be given to these students. No longer can a simple solution of returning the child to school be acceptable. The reasons behind the chronic absenteeism must be ascertained and investigated. If these reasons can be found early, guidance and help can be afforded the student so as to avoid the attendance problem in the future. Treat-

A Six-Year Study of Teacher Turnover in the Public Schools of Terre Haute, Indiana (1955-1960)

Norman L. Darrow

Director of Administrative Services, Vigo County School Corporation, Terre Haute, Indiana

(Summary of an Advanced Thesis Presented to the Faculty of the Education Department, Indiana State Teachers College in partial fulfillment of the requirements for the Advanced Degree in Education).

Thesis Committee: Dr. Fred Swalls, Chairman; Dr. Charles Hardaway, Dr. Paul Muse

· A CRITICAL problem facing American school administrators today is that of teacher turnover. In its broadest sense, this means the necessity of filling positions regardless of how they happen to exist as unfilled positions.

A vacant teaching position may occur for one of several reasons, such as, due to death, retirement, resignation or dismissal. In any event, these vacancies must be filled with people other than those who previously held them. This, then, is teacher turnover.

Teaching is no exception to the accepted principle that a rapid rate of personnel turnover is detrimental to the best interests of the organization. Experience on the job makes for better understandings of the problems to be faced.

Vacancies caused by death can neither be anticipated nor prevented and though retirement can be anticipated, it is inevitable. Therefore, the crux of the turnover problem rests with resignations.

I. THE PROBLEM AND METHODS OF PROCEDURE

The purpose of this study was to determine the extent of teacher turnover in the Terre Haute, Indiana, public school system during the period 1955-1960 inclusive. All regularly contracted teachers who left their positions for any reason during the six year period of the study were included. The reasons for leaving were grouped under one of the following three headings: (1) Death; (2) Retirement; and (3) Resignation. Obviously, in a system as large as Terre Haute, some teachers were dismissed during the period studied; however, due to the inability of the writer to identify all of these persons, they have been included under the heading "Resignations."

This study was primarily concerned with discovering the following information:

- The number of staff members leaving annually
- 2. The percentage of those leaving annually compared to the total number employed
- 3. The reasons given by staff members for leaving
- The education and experience of those who left. The location of the high school from which departing teachers were graduated
- The teaching areas or teaching levels represented by the staff members who left
- The last annual salaries earned by those who left
- 8. The reasons given for resignations received

The data for this study were secured from original sources kept by the School City of Terre Haute. Individual file folders maintained for all school personnel were consulted first. An alphabetical perpetual inventory Kardex file kept up-to-date on all personnel was also consulted. Another valuable source of data was the actual minutes of the School Board which are kept in bound volumes. In fact, any and all information and records kept by the School City of Terre Haute which were pertinent to this study were available to and utilized by the writer.

After determining the data which was to be secured, an information sheet devised by the writer was completed for each teacher who left during the period of this study. The six-year period, 1955-1960, was chosen because it afforded the most recent and up-to-date data. Using information gathered from the sources mentioned, tables were then prepared and treated.

One delimiting aspect of this study was that the length of the period was only six years. Also, as this study was limited to the city of Terre Haute, Indiana, the findings may not be typical if compared to studies made of similar school systems.

I. SUMMARY AND CONCLUSIONS

During the period studied, a total of 223 teachers left for all reasons. Of these, 139 were due to resignations. Each year of the study indicated that more than 55 per cent of the leaving personnel resigned. It would appear, therefore, that the primary hope of reducing teacher turnover lies in the area of teacher resignations.

This survey revealed that Terre Haute did not have an annual teacher turnover rate exceeding ten per cent during any year covered by the study. Also, the largest number of teachers who left during the period studied consisted of resigning elementary female teachers who had less than five years experience. In most cases this same group possessed only a baccalaureate degree. It seems reasonable then that the surest way to decrease teacher turnover in Terre Haute would be to reduce the number of elementary female resignations.

A great need exists for inducing more male elementary teachers into the Terre Haute system. This is clearly indicated by the fact that only one male elementary teacher resignation in the year 1955 produced a higher percentage of turnover among the males than ten female elementary teacher resignations did among the females for that same year. In contrast, however, male secondary teachers have been gaining in number compared to female secondary teachers in Terre Haute and since 1959 have been in the majority. This is consistent with the national trend.¹

Eighty-nine per cent of all the teachers who left during the period of this survey were graduates of Indiana high schools. Of these people over one-half were graduates of Terre Haute, Indiana, high schools.

Of the 139 teachers who resigned during the period of this study, 94 per cent were earning less than \$5,500 during the year of their departure. It must be kept in mind, however, that the majority of these people possessed only the baccalaureate degree and had less than five years experience. They were, therefore, at the beginning end of the salary schedule.

A substantial number of teachers left the Terre Haute schools who were categorized as "Combination" people. This meant that they taught in more than one subject field. Today, most secondary teachers specialize and therefore prefer to teach in one specified area.

III. RECOMMENDATIONS

Based on the results of this study and the conclusions reached, the following recommendations are submitted:

- It would be advisable for the administration of the Terre Haute schools to employ a larger number of male elementary teachers.
- 2. Persons not possessing a Master's Degree should be encouraged to secure it at the earliest possible date after acquiring some teaching experience. This study further indicates that effort in this respect should be especially directed toward those teachers who have not yet completed five years of teaching.
- Because of the number of resignations among those teachers who teach in more than one area, it is recommended that further research be done to determine whether this is a significant factor in teacher turnover.
- 4. Securing specific reasons for teachers' resignations would be desirable. It is recommended that more complete information be required in the future from those who resign and that a follow-up record of their succeeding position be maintained.
- 5. It is further recommended that the newly organized Vigo County School Corporation be alert to the problem of teacher turnover. It is hoped that the low rate of teacher turnover experienced by the School City of Terre Haute can be maintained.

¹U. S. News and World Report, 49:16, December 12, 1960.

Women Characters in George Eliot's Novels

Edith I. Jones

Teacher of English, Wiley High School, Vigo County School Corporation, Terre Haute, Indiana

(Summary of an Advanced Thesis presented to the Education Department, Indiana State Teachers College, in partial fulfillment of the requirement for the Advanced Degree in Education.)

Thesis Committee: Dr. Albert Fyfe (Chairman), Dr. Joseph Schick, Dr. Jacob Cobb.

• DURING THE past thirty years, beginning with Trollope, one after another of the great novelists has

been revived. Though George Eliot was the last, the critical position of her novels in Great Britain is now preeminent and in America higher than that of any other Victorian save Henry James.

The purpose of this study was first to consider George Eliot as a woman living in and experiencing the changing concepts of women of the Victorian period. The ultimate purpose in studying George Eliot and her period was to provide the reader a background for a better understanding and appreciation of her novels.

A study was made first to attempt to interpret the standards of the Victorian women. Next a study was made of the social pressures on the life of George Eliot as a Victorian woman and of the effects of the social imprints upon the literary women characters, some of whom were autobiographical in varying degrees. The women characters studied were restricted to the more important characters in George Eliot's four novels: The Mill on the Floss, Romola, Middlemarch, and Daniel Deronda.

The Victorian period for women was one of progress and prejudice, one of freedom and restrained liberty, and one of social conscience and exploitation. It was an age in which the many frustrations and the discontent of women came to a head and broke through the social surface. All Victorian women had their common problems. However, it was the woman in the middle class who became the symbol of Victorian respectability.

The Victorian woman gained dignity and social status in her marriage, but lost her legal status in that her husband assumed legal responsibility for her. She was unable to obtain a sound, formal education and was able to keep herself informed only by reading. Because of her economic position, she was still largely dependent on her powers of sex attraction to obtain financial security by marriage: thus, virtue became a necessity and modesty an art. The Victorian woman devoted her leisure time to social service work, letter writing, sewing, riding horseback, skating, engaging in archery, attending the theatres, and reading material conducive to improving the status of women. Her costumes were beautiful, cumbersome, and uncomfortable. Prudery in dress became synonymous with respectability. She believed that she must renounce much for the sake of humanity and resign herself to endure many unpleasant hardships, and that a true resignation and renunciation would enable her to turn pain and sorrow into the means of a higher life. By the end of the century, the Victorian woman was able to break through the surface of English social customs and emerge with more work opportunities, more civil and legal rights, and a higher position of respect and dignity for womanhood.

George Eliot's life typifies the struggles and aspirations of a very distinguished Victorian woman. When Queen Victoria was at the zenith of her reign, George Eliot was at the height of her literary career. The author felt deeply the many social pressures, some of which she expressed in the woman characters in her books. She lived in intellectual solitude, conscious of abilities for which she could find no definite outlet and with no one in her immediate circle capable of guiding or even appreciating her pursuits. The love of her family, the suffering from ostracism as a result of her life with

Mr. George Lewis, the awareness of labor and social problems, and the memories of her own childhood enlarged her sympathy for humanity and aided in the writings of her novels which she began at the age of thirty-one. However, the most important women characters revealed a gracious feminine mind with the bitterness washed out by meditation and brightened by love.

Even though the portraits of George Eliot might suggest that she was masculine in appearance, the opposite is true. She was very sympathetic with Victorian feminism, but she was not an ardent crusader. She was eager to redress injustices to women and to raise their general status in the community. Although George Eliot felt that woman's place was first in the home, she wished God-speed to women's colleges and aided them financially.

Chiefly, it was in the portraiture of women characters in her novels that George Eliot was feminine. She set up conflicts within the heroines' characters and took them through their experiences in her novels. The women she drew were passionate ones whom life had hurt severely and who had sought to steady themselves in their pain by the vigorous performance of duty.

Neither her major or minor women characters were ordinary ones. Since George Eliot grew up in a home where there was no antagonism between the sexes, she was able to draw realistic and normal women in her novels. However, since she had suffered severely from her social ostracism, she transferred a suffering spirit martyred to duty to many of her women characters.

The marked womanliness of the nature of George Eloit enabled her to create the major characters of Maggie Tulliver in The Mill on the Floss, Romola Bardi in Romola, Dorothea Brooke in Middlemarch, and Gwendolen Harleth in Daniel Deronda. These feminine characters had their opposites: Maggie Tulliver and Lucy Deane. Romola Berdi and Tessa, Dorothea Brooke and Rosemary Vincy, and Gwendolen Harleth and Mirah Lapidoth. These heroines were challenged by an imperfect Victorian society and passed through ordeals in which they came in collision with characters of baser composition. Often the feelings of these heroines took the aspect of error, or their great faiths took the aspects of illusion.

Maggie Tulliver of The Mill on the Floss was an uninhibited heroine incompatible with her environment and possessed a nature which demanded spiritual, intellectual, and physical gratifications which the materialistic, aesthetically barren community of St. Ogg's was unable to provide. Her childhood resembled that of George Eliot's very much; hence, the first part of the story was autobiographical. Maggie loved easily and without restraint. She was drawn to Phillip Waken

because of pity for his deformity. In Stephen Guest, she found the aesthetic element which was lacking in her barren life. Maggie was disenchanted by her family's financial difficulty, by her father's illness, by the lasting feeling of separation from her brother Tom and from society, and by a sense of the impotence of aspiration in her life. In contrast to Maggie, Lucy Deane, her cousin, was an idealized character. Lucy was a Victorian prig who had enough sweetness to be bearable; Maggie was honest, frank, and natural even if she was an individualist.

Romola, the noble and beautiful Florentine girl. was the one of the notable heroines whom George Eliot attempted to depict as an intellectual idealist. In some ways. Romola was more of a self portrait of the author than Maggie. One of Romola's outstanding characteristics was her ardor which was shown in her devotion to her father, to her husband Tito, and later to Savonarola, the Florentine reformer. Later, Romola felt deeply the impact of the assassination of her godfather, Bernardo Del Nero: the justified murder of Tito by Baldasarre; and the execution of Savonarola as a result of Tito's treachery. In contrast to Romola was the pretty, stupid character named Tessa, who went through a mock marriage ceremony with Tito and believed herself married to him. Finally, Romola and Tessa, with such opposite mental capacities, lived together and worked for a common interest, the rearing of the children of Tito and Tessa. Even though Romola was perhaps the loftiest and most statuesque of all the heroines, she was not as warm a character as Maggie. Although she married a scoundrel, the misconception to which she fell victim was thoroughly natural.

Dorothea Brooke in Middlemarch was a beautiful, nobleminded, ardent, Theresa-type heroine with an intense longing for goodness and with a great desire to be helpful to others. While Dorothea and Maggie were two idealists who struggled for knowledge, Dorothea's struggle was for a higher stratum of culture. Because of her ardor for knowledge, Dorothea made her fatal mistake when she married the elderly and wealthy clergyman, Rev. Edward Casubon, to help him write the Key to All Mythologies. She was disillusioned to find this great work was an occuption to offer Rev. Casaubon a retreat from active living. Dorothea's misguided adoration was very natural for a girl of the Victorian period. After the death of Rev. Casaubon, Dorothea married Will Ladislaw, a dilettante who was spontaneous, responded to beauty in art, admired nobility in character, and was not self-conscious. It was not until after the birth of Dorothea's son and Ladislaw's election to Parliament that Dorothea's family recognized her second marriage. In contrast to Dorothea was Rosamond Vincy, who married Dr. Lydgate and forced him to give up his scientific research, to look for rich patients, and to develop a bedside manner. Another contrast to the selfish Rosamond Vincy was Mary Garth, who possessed a good sense, a quick intelligence, and a fine strength of character. Of these three women characters, Dorothea was the most altruistic; Rosamond, the most egotistic; and Mary Garth, the most wholesome.

In Daniel Deronda, Gwendolen Harleth, the heroine, was beautiful, selfish, and undisciplined. The roulette used by her for gambling was symbolic of Fortune's wheel, but she was incapable of observing any similarity. Gwendolen, like Maggie and Mary Garth, tried to escape the fate of becoming a governess: therefore, she married Grandcourt, a domineering nobleman. Gwendolen's ordeal in her marriage was as pathetic as that of Romola's. Gwendolen changed from the glowing girl, dominating her own surroundings, to the subdued wife in the grip of a man of hardened selfishness. Deronda, Gwendolen's adviser, preached the lesson of transmutation of self to her. As Gwendolen receded in her relationship with Deronda, Mirah Lapidoth, a pretty Jewess whom Daniel has rescued from the Thames, became the girl he admired and loved. Mirah expected less from life than Gwendolen and gave more in service to others. However, Gwendolen appeared to have learned a lesson and, no doubt, would take Deronda's advice by going out to serve those in need.

Although George Eliot's heroines had many similarities and often followed certain patterns, they had their differences also. No two had evactly the same strong points or the same flaws. Maggie had passionate capriciousness and much generosity; Dorothea had her blundering and blinding zeal; Gwendolen had strong, almost superstitious fears and a too strong reliance on her powers; and Romola was calm and passive.

When the heroines were faced with the problem of assuming careers, not one wanted to be an authoress or a governess. Maggie was the only character who did not marry or plan to marry. Romola was the one with a superior education. Gwendolen and Rosamond were the typical products of the English girls' schools. Dorothea and Mirah had no formal education. Maggie was practically uneducated though she had high native ability and craved knowledge. All the heroines were quite without the knowledge of the irreversible laws, within and without, that govern conduct.

All heroines had a certain likeness to their creator. Maggie was most like her creator. Dorothea was like George Eliot in her keen sense of duty. Rosamond's paralyzing the ambition of Dr. Lydgate was the most antipathetic act to George Eliot. Dorothea, Romola, and Mirah were all idealized heroines. However,

Dorothea and Romola were forced to recognize the egoism of their ideals. Maggie, Gwendolen, and Rosamond were the unidealized heroines. Gwendolen went the farthest in being undisciplined and, in the end, was the haunted one.

None of the heroines had tragic endings in the view of the author. Maggie was rescued by death and reconciled with her brother Tom. Gwendolen and Romola were left alone after their unhappy marriages, but Romola found solace in caring for Tessa and the children. Gwendolen was in the proper frame of mind to give service to others. Dorothea was, as we judge from the author's "Finale." the happiest of the group in her new marriage for which she had sacrificed her fortune. Mirah, Mary Garth, and Rosamond had prospects of happy marriages.

The heroines had an initial handicap in that they were women. They all had the conventional equipment needed-intelligence, imagination, the power to speak for themselves, and sensibility in varying degrees. The lack of education of the heroines was emphasized by having the heroines rescued by heroes superior in education and in understanding. However, in general, these heroes did not reflect the deep penetration of character that the heroines did. The author used her philosophical mind to portray women of subtlety and charm; these characters were superior in portrayal to her masculine characters. The heroines struggle with two forces: the passion of feeling and the effort to subdue that feeling with a philosophy, the result of which is thought held in control and applied impersonally. Their powers of minds and richness of emotional natures were rarely equaled. Hidden in their narrow and commonplace environments was much good. There were no entirely ignorant women in the four novels; however, the ideal

woman character was the Romola type with a wealth of learning and of enlightenment. This learning enriched rather than endangered the heroines' marriage relationships by making friendship possible within the marriages. The characters revealed that womanhood in its fullest is developed by education, by liberty, and by responsibility and that royalty of spirit is developed through the recognition of the women's differences, the women's needs, and the women's duties.

Lastly, the women characters revealed that a woman's lot is made for her by the love she accepts. This love is the medium through which ideal service is to be obtained. It was in the author's analysis of homeloving women that she showed most thoroughly the right to be reckoned among the great interpreters of women. Her women characters have sanity, poise, sensibilities, tolerant spirits, desires for social service, and humanitarianism. Thus, by looking into the world of women characters that George Eliot portrayed in her own way, the reader shares the predilections and prejudices of the characters that reflect much credit to their Victorian creator.

BIBLIOGRAPHY

Dunbar, Janet. The Early Victorian Woman. London: George C. Harrap & Co. Ltd., 1953.

Haight, Gordon S. (ed.). The George Eliot Letters. New Haven: Yale University Press, 1954.

Hardy, Barbara. The Novels of George Eliot. London: The Athlone Press, 1959.

Stephen, Leslie. George Eliot. New York: The Macmillan Company, 1913.

Williams, Blanche Colton. George Eliot. New York: The Macmillan Company, 1936.

The Effect of Different Criteria Used by Teachers and Children in Their Judgments of School Performance

Department of Special Education, Indiana State College, Terre Haute, Indiana

The author wishes to express his thanks to Miss Rowena Piety, Special Class Teacher, Laboratory School, Indiana State Teachers College, for her cooperation and assistance during this study.

Background of the Problem

• WHEN CHILDREN have developed socially to the point that they are able to show preferences among their associates, it is possible to obtain some measure of the social choice they make. The choices made by children in any group can be assessed long before they enter elementary school and consequently their social interaction can be measured.

Some of the factors which appear to influence the

formation of friendship and choices of companions in elementary school children are presented by Jersild in his discussion of the social behavior of children. He lists such determinants as propinquity, intelligence, height, age, sex, ability to complement one another, and willingness to play ascendant or nonascendant roles.

Many systematic methods of sociometric rating have been used to study the acceptance patterns of children. Cronbach² presents a discussion of these sociometric peer ratings in the second edition of Essentials of Psychological Testing. He defines the term "sociometric ratings" as those methods of identifying social relationships among peer group members.

These sociometric techniques are relatively simple and often yield much information of immediate practical value to the investigator. Teachers especially have found the results of sociometric ratings to be useful. For example, research has found that nonpromoted pupils were seldom chosen by regularly promoted pupils, that popular children are above average in scholastic standing, and that children rated as popular by other children are also rated as popular by teachers.

It should not be concluded from this that there is a high positive relationship between intelligence and peer acceptance. As Jersild states:

"...One reason, among others, why the correlation between 'success' in life and academic achievement is far from perfect is that qualities other than intellectual ability are important in determining success, and those qualities include the social qualities that enable a person to get along with others..."³

Cronbach⁴ points out that "...a child who impresses his peers as being a leader may not be the one whom the teacher regards as a leader..."

Any technique to measure behavior must be examined in regard to its reliability and validity. In the past it has been found that composite peer ratings generally have reliabilities of about .90 when the trait being rated is well-defined and the group has had an adequate opportunity to know each other.⁵

The validity of one sociometric technique is indicated in a study by Byrd⁶ who found that the stated choices of pupils correlated .80 with their actual choices

in a real situation at a later time. Ordinarily it is sufficient to say at this point that sociometric devices have "face" validity only, and for the kind of question asked.

Two recent studies, in addition to those reported by Jersild, are germane to this investigation. In a rather extensive study, Chickering presented evidence that underachievers apply negative self-perceptions to themselves to a greater degree than do overachievers.⁸

Reeder⁹, was concerned with the relationship of the peer status of the middle grade child to his academic achievement. She also considered the relationship of the self-concept to behavioral manifestation, peer status, and achievement. Her conclusions were that children with low self-concept have lower sociometric status, achieve less than their potential, and are more frequently classified as having problem behavior than pupils with a high self-concept.

Statement of the Problem

The major hypothesis tested in this investigation was that there is a positive relationship between a teacher's estimates of academic achievement of children and children's estimates of that achievement.

It was also hypothesized that there is a positive relationship between a child's estimate of his achievement and the estimates by his peers.

It was hypothesized that the positive relationship between teacher estimates of achievement and group estimates is higher in cases when the teacher bases her estimates on considerations other than the absolute level of achievement. These considerations will be operationally defined in a later section of this paper.

It was hypothesized that there is a positive relationship between group estimates of achievement and the way in which the teacher believes the children will rank each other.

Methodology

The subjects in this study consisted of 12 physically handicapped children, 6 boys and 6 girls, who ranged in chronological age of 7 through 13. They were currently attending a special class for physically handicapped children in the Laboratory School of Indiana State College, Terre Haute, Indiana. The teacher has

¹For a complete summary of this topic see Arthur T. Jersild, Child Psychology, 4th ed., 1954, pp. 238-248.

²Lee J. Cronbach, **Essentials of Psychological Testing** (2nd ed.), 1960, pp. 518-528.

³ Jersild, op cit. pp. 243-244.

⁴Cronbach, op. cit. p. 518.

⁵lbid., p. 518.

⁶Eugene Byrd, A Study of Validity and Constancy of Choice in a Sociometric Test, **Sociometry**, 1951, 14, 175-81.

⁷Frederick J. McDonald, Educational Psychology, 1959, p. 603.

^{*}Arthur W. Chickering, Self Concept, Ideal Self Concept, and Achievement, Dissertation Abstracts, 1958. p. 164.

⁹Thelma Reeder, A Study of Some Relationships Between Level of Self Concept, Academic Achievement, and Classroom Adjustment, **Dissertation Abstracts**, 1955, p. 2472.

taught mentally handicapped children for two years and physically handicapped children for three years. She has the MS degree.

In the past it has been common practice for investigators to select stars, isolates, and neglectees through the usual technique of asking children to select a preferred peer according to a stated criterion. The usual procedure is to question a child as to which of his peers he would select from the group according to the criterion.¹⁰

The present investigation departed from the usual procedure in that children were asked to rank their peers in order of preference according to the stated criterion. It was believed that this would result in a more direct measure of relative group standing of individuals than an inferred position which is based on the frequency of choice within the group as has been done by most investigators in the past.

Peer ranking in this study was accomplished as follows: Individual cards, each bearing a stylized human figure and the identifying name of one child in the class, were placed before the child in a random arrangement and with each card fully visible. There was a card for each child in the class. The examiner said, "I have some make-believe pictures of all the people in your room. Your picture-card is here, too. Now I want you to put the picture of the person who does the best job in school-here. (The examiner indicated a place on the table near left of the subject) Then put the picture of the person who does the next best job here. (Indicated a place near and to the right of the first card) Then next best, and so on until you have the picture of the person who does the best job here (indicated upper end area) and those who do not do so well down here." (Indicated lower end of area) The child was then requested to read the names of the children to the examiner in the order in which he ranked his peers. It was considered inadvisable to have the children read the name cards aloud before ranking them because of the possible effects of a set to duplicate the named order. The single naming was sufficient to determine whether the child could read the names. This provided a check for the child to correct any unintentional errors he might have made. This procedure was repeated for each child in the group. A record of the rankings was made by the examiner by simple listing.

The teacher was then presented with the same cards with the following instructions: "Rank these children according to their level of school achievement. Place

the card of the child here (indicated) who performs at the highest academic achievement level, next best here, and so forth. I am interested only in obtaining an absolute ranking in much the same way as we could do if we were ranking these children from high to low on the basis of achievement test scores." The results were recorded by the examiner and were called an "absolute" level of achievement.

The teacher was then presented with the same cards immediately following the first presentation and with the following instructions: "Rank these children according to their achievement, taking into consideration their intelligence test scores, type and degree of physical handicap, length of time in school, personal adjustment, family situations, and any other factors which you normally consider when making an evaluation of the adequacy of the child's performance. This is a kind of achievement quotient ranking with many subjective judgments on your part as to which children are doing as well as they should in school." The result of this ranking by the teacher was called "considered" achievement.

It was recognized that the instructions to the children and the teacher differed. This difference was intentional in order to test the stated hypotheses.

Five weeks after the teacher's initial ranking she was requested to "rank these children as you believe they will rank each other when they are requested to rank each other in terms of who does the best job in school."

The above procedures were repeated in 4 weeks with the children making a total of 2 rankings of their peers and the teacher making 5 rankings of the children; twice on each achievement criterion and once on the group perception criterion.

Rank order correlations were obtained from the data as follows:

- 1. Test-retest correlations for the group rankings to establish the reliability of the group's ranking.
- 2. Test-retest correlation for the teacher rankings ("absolute" and "considered" achievement).
- Mean of the group's ranking of each individual and absolute achievement.
- Mean of the group's ranking of each individual and considered achievement.
- Absolute achievement and considered achievement.
- Mean self ranking and the mean of the group's ranking of the person.
- Mean self ranking and absolute level of achievement.

¹⁰ Murray R. Thomas, Judging Student Progress, 1954, p. 201.

- 8. Mean self ranking and considered achievement.
- Mean ranking of the group and the way in which the teacher believes the children will rank each other.

Limitations

This was an exploratory study and consequently it was anticipated that it would leave many unanswered questions regarding the relationship between achievement and peer perception of that achievement and teacher perception of the achievement. Many independent variables were ignored.

Analysis of Data-Procedure

The raw data from this study were prepared for analysis as follows:

- Raw ranks were retained in the original form for the test-retest reliability correlations. The first rankings were compared with rankings made four weeks later.
- 2. For the data which concerned group rankings, it was necessary to compute the mean of the rankings by peers for each member of the group. The mean of the rankings of eleven peers thus made up the group ranking for each child.
- Self rankings were determined by taking the initial self ranking and the self ranking obtained four weeks later.

Analysis of Data-Results

The reliability of the instrument used in this study is indicated by test-retest rank order correlations of sufficient magnitude to reject the hypothesis of independence at the .05 level. ¹¹ For example, when the children of the group ranked each other in terms of the stated criterion and then were requested to perform the same rankings four weeks later, a rank order correlation of 9.4 was found between the two rankings.

The test-retest correlations of the teacher's two "considered" and two "absolute" rankings with a four week interval were found to be .99 and significant at the .05 level.

When the teacher's "absolute" and "considered" rankings of the group were compared, a correlation of .18 was found. The hypothesis of independence was not rejected at the .05 level of significance.

Correlations between the self ranking and the mean group ranking, "absolute" level of achievement, and "considered" level of achievement, were found to be .59, .44, and .46 respectively. The correlation between self ranking and that of the group (.59) was the only one of the three which permits rejection of the hypothesis of independence at the .05 level.

Finally, the correlation between the mean ranking of the group and the way in which the teacher believed the children would rank each other was found to be .67. A correlation of this size is significant at the .05 level.

Discussion

This exploratory investigation indicates that the sociometric technique of having children rank each other according to a stated criterion tends to be highly reliable when used under the conditions specified in this study. The reliability of the instrument is at least as high as the .90 reliabilities of sociometric techniques reported by Cronbach.¹². This ranking technique is just as reliable when used by the teacher to rank according to a stated criterion.

The data suggests that children base their judgments of their peers' ability to "do a good job in school" on factors other than the actual achievement of their peers. This may be because children are unaware of the actual achievement of their peers, or it may be because "doing a good job" is interpreted by children as encompassing more than performing adequately in in purely academic tasks.

When it is recognized that the relationship between the "absolute" and "considered" levels of achievement as viewed by the teacher is relatively low, it becomes apparent that the instructions given to the teacher influence her ranking of the children. Had the teacher been presented with the same instructions as the children received, there would be no means of determining what the teacher or the children were taking into consideration in making their rankings. As a result of the procedure followed in this investigation, it has been possible to find a greater degree of agreement between the group rankings and the teacher's "considered" rankings. Since this relationship exists, there is some basis for the assumption that children probably interpret "doing a good job" as meaning something other than performing in academic tasks as defined by absolute achievement. These conclusions are supported by the low correlation (.19) between group rankings and "absolute" achievement, and the significant (.62) correlation between group rankings and the "considered" rankings.

A cursory examination of the data indicates evi-

¹¹Philip J. McCarthy, Introduction to Statistical Reasoning, 1957, p. 383, (table 12.7)

¹²Cronbach, op. cit., p. 518.

dence that a child's perception of himself as a member of the group is more closely related to the group's perception of him than it is the teacher's perception. Caution must be exercised so as not to draw false conclusions from this statement. It should be remembered that the self-group relationship is based on the same criterion while the self-teacher relationship is based on different criteria and hence the apparent differences are spurious in this case. All that can be concluded from the data which pertain to the relationship between the self rankings and other rankings is that there is a significant positive relationship between a child's perception of his position in the group in terms of the criterion of doing a good job and the groups perception of his position.

Finally, it has been shown that the teacher is able to "put herself in the shoes of the group" and rank the members of the group" and rank the members of the group in much the same way as the group ranks itself.

Conclusions

All of the hypotheses advanced in this study were supported.

It is also concluded that the instrument which was used in this investigation was sufficiently reliable for the intended purpose.

There is some evidence to indicate that when children are asked to rank their peers in terms of "who does the best job in school," the children interpret the statement to mean something other than performing in academic tasks.

Hilda L. Brackwinkle Mary Asbury Collings Daniel J. Payne Donald Lee Kiser Roger A. Hofferth

There appears to be a significant positive relationship between a child's perception of his position in the group in terms of the criterion of "doing a good job in school" and the group's perception of his position.

The teacher in this study was able to perceive the group as the group perceives itself.

BIBLIOGRAPHY

Byrd, Eugene, A Study of Validity and Constancy of Choice in a Sociometric Test, Sociometry, 1951, 14, 175-81.

Chickering, Arthur W., Self Concept, Ideal Self Concept, and Achievement, Dissertation Abstracts, 1958, p. 164.

Cronbach, Lee J., Essentials of Psychological Testing, Harper & Bros.: New York, 2nd ed., 1960, 650 pages.

Jersild, Arthur T., Child Psychology, Prentice-Hall: New York, 4th ed., 1954, 676 pages.

McCarthy, Philip J., Introduction to Statistical Reasoning, McGraw-Hill Book Co.: New York, 1957, 402 pages.

McDonald, Frederick J., Educational Psychology, Wadsworth Publishing Co.: San Francisco, 1959, 748 pages.

Reeder, Thelma, A Study of Some Relationships Between Level of Self Concept, Academic Achievement, and Classroom Adjustment. Dissertation Abstracts, 1955, p. 2472.

Thomas, Murry R., Judging Student Progress, Longmans Green: New York, 1954, 421 pages.

Abstracts of Master's Theses

Method. The survey method was followed in this study. Twenty-three librarians in twenty-five consolidating schools were interviewed using as a basis for personal interviews a prepared interview form. The data secured were analyzed and summarized in this study.

Findings. Improvements in training of library personnel and more adequate provision of physical facilities, library materials, and finances to support a good library program were found to be closely correlated with improvements in general school facilities. Noted improvements in all these areas were found where school

for the Merger of School Libraries in School Consolidation. June, 1961, Pp. ix + 86. Series I, No. 806.

Brackwinkle, Hilda L. A Study of Workable Plans

Committee: Miss Nelle McCalla, Chairman; Miss Elizabeth Weller, Dr. Charles Hardaway.

Problem. The purpose of this study was to determine the plans made for merger of school libraries and what had been done in establishing the new library in consolidating schools regarding (1) determination of library personnel, (2) establishment of physical facilities, (3) synthesizing collections, and (4) providing finances.

consolidation had resulted in new buildings for the new school corporation.

More schools were served by licensed librarians than before consolidation even though no more librarians had been employed. A librarian served more students. The determination as to which librarian in the consolidating school corporation was to be the librarian in the new school corporation was no problem, for rarely was there more than one licensed librarian in the schools involved.

Few libraries in new buildings were combined with study hall. Libraries were more centrally located in the classroom area. A minimum of one librarian's office-workroom combination, supplied with running water, work and storage space, electric outlets, and a type-writer, had been provided. Seating capacity of the reading room was much improved but often still inadequate to meet needs of students. Adjustable shelving had been provided. All had wall shelving; some had additional counter-height floor shelving, but the amount of shelving space was often inadequate. Card catalogs and charging desks had been provided.

Nearly all schools had some audio-visual equipment and materials. More librarians were responsible for administration of materials than for equipment.

Moving the collection or part of it was generally involved. Necessary catalog work and preparation of

collection for moving varied with state of organization of existing collections. Necessary discarding was done before and after moving. In few cases was catalog work completed before moving.

Books were generally separated into fiction and nonfiction and if classified, packed according to arrangement on the shelves.

Three basic methods for organizing the card catalog were (1) construction of new card catalog, (2) interfiling corrected catalogs, and using one catalog as a base and treating other collections as new materials.

Accession records were constructed either by adding one collection to another or constructing a new one beginning with number "one" and following the shelves in the new library.

Shelving in the new libraries followed one of two basic patterns: (1) shelving one collection and adding the others, or (2) shelving according to a combined shelf list.

Student assistants were used in varying degrees for non-technical work.

Time for doing the necessary reorganization work was the big problem, especially for the teacher-librarian.

Library finances were greatly improved, but much remains to be done before the minimum new standards in this area will have been met.

Collings, Marie Asbury. Planning Library Quarters for the Rockville Schools. May, 1916. 77 pp. Series I. No. 807.

Committee: Miss Nelle McCalla, Chairman; Miss Elizabeth Weller, Dr. Elmer Clark

Problem. The purpose of this study was to plan adequate quarters and equipment for an elementary and a high school library for the Rockville schools.

Method. In order to collect information pertinent to planning school libraries, this study followed two types of research. The first was to read widely about planning school library quarters and equipment and the philosophy of school library service. The other approach was to visit other libraries and talk with librarians to get viewpoints from those more experienced in the field.

Findings. Successful library planning depends upon a broad knowledge of modern educational problems and trends, the educational objectives of the school the library will serve, and current philosophy of library service. The first consideration for planning functional libraries for any grade level is to meet the present needs of the school but keep future needs in mind. It must be remembered that a library is no longer just a place to store books; it is a materials center that serves, teaches, and circulates all kinds of materials freely.

The importance of cooperative planning by the administrator, architect, and librarian cannot be stressed too greatly. It is urged that all three be thoroughly familiar with national standards for library programs. However, the librarian must be alert to her opportunity to provide information about standards at any time.

Accessibility is the keynote for locating the library. If possible, it should be centralized—near the greatest number of users. Avoid locations in noise areas, as shops and cafeterias, and engineering specifications of the architect should insure a minimum of noise in situations within his control.

The library design should offer variation in shape and size to the classroom and should be large enough to seat the largest class, plus a few extra. The audiovisual and conference rooms should offer privacy, yet be so integrated by coloring and design that the quarters will have the appearance of a unified whole.

Furnishings should be simple in design, light in color, and well built with some variety in shape and size. The air of simplicity and informality, desired characteristics, may be created by arrangement and skillful use of color. Quick rearrangement is often desirable; therefore, most of the furnishings should be movable.

The general decorative scheme should be attractive, restful, and inviting. Individual tastes help determine the color schemes, but general principles of decorating in art and design should serve as a guide.

Lighting, ventilation, heating, and most of the sound control are engineering problems in the field of the architect.

All added areas, as the professional room, conference rooms, and story-hour unit, have justified them-

selves in the library program. Perhaps no part of the quarters will contribute more to the appreciation of books than the story-hour area in the elementary library or an informal corner in the high school. By furnishings and arrangement both should be outstanding.

The library should by its attractive appearance invite users to return and by the standard of service given lend substantial aid to the school in reaching its objectives.

All this idealistic approach to library service through suitable quarters presupposes that the service will be strengthened in other ways as: (1) providing a balanced collection of materials; (2) providing an adequate staff; and (3) giving proper guidance in the use of the library and the materials. It will be by this quality of service that the Rockville libraries can justify their place in the curriculum, the money spent in providing them, and the faith placed by leading educators in "quality" libraries for "quality" education.

Payne, Daniel J. An Exploration of the Problems Involved in Writing and Producing a Three-Act Play. April, 1961. Pp. v + 200. Series I, No. 808.

Committee: Dr. Gladys Rohrig, Chairman; Mr. Thomas Headley, Mrs. Jean Sanders

Problem. The specific purpose of this study was to explore the problems of writing and producing a three-act play.

Method. The method used in this study was twofold. First the author wrote a three-act play. The play depicted Russian people, the author theorized, as Americans saw them. The play was also an experiment to see if an audience would accept a serious situation satirized, if the situation took place in Russia.

After the writing was completed, the play was produced.

Findings. Writing a play is a difficult job for an experienced playwright. The author in this study was inexperienced. Inexperience led to most of the problems confronted.

Burial was the serious topic chosen for satire by the author. The audience laughed at the situations. This indicated that Americans would accept ridicule involving a serious subject provided that the situation took place in Russia.

The characterization of Russians as Americans saw them was inconclusive from an experimental point of view. Although the audience reaction was favorable, it was difficult to tell whether the reactions were caused by the situations or by the characterizations.

The biggest drawback in production was the age of the cast. High school students are too immature to completely understand the characters in this play.

The author chose constructivism as the style of scenic design. This was a mistake. The audience had difficulty following the scene changes. A box set or multiple stage settings would have been a better method of staging this play.

Some of the dialogue and action had to be changed or deleted during rehearsal and after performance. Part of the dialogue was difficult for the cast to understand. Two portions of the play were deleted entirely because they did not move the plot forward.

The play was produced to see if it was workable on stage. The play had many faults but it did play. It held the audiences attention even though it ran long.

In general, however, the project was a success. The author discovered that he had the potentiality to write in play form. Through the many errors he made he has profitted greatly.

This study may be of value to future playwrights. They can study the thesis and note the problems they, too, may have to face.

Kiser, Donald Lee. The Polarographic Determination of Cobalt in Potassium Iodide. May, 1961. Pp. vii + 41. Series I, No. 809.

Committee: Mr. William G. Kessel, Chairman, Dr. Earl C. Smith, Dr. Byron L. Westfall.

Problem: The purpose of this study was to attempt to develop a method for the polarographic determination of cobalt in a potassium iodide supporting electrolyte.

Technique: Work was done on a Sargent Model XXI polarograph equipped with an automatic recorder. Preliminary work gave a good reduction wave of cobalt (II) in one-tenth normal potassium iodide. Each of the variables of the system were checked, one at a time, to determine the optimum conditions.

Results: From the data, a method for the determination of cobalt in both solid and liquid samples was proposed that uses a one-tenth normal potassium iodide electrolyte with 0.01 per cent gelatin included to suppress the maximum. A calibration curve showed that the diffusion current was not exactly proportional to the concentration of cobalt, but the deviation was small. Reproducible results were obtained on calibration samples analyzed two days apart. The calibration range was found to be from thirty to eight thousand micrograms of cobalt in a ten milliliter solution.

Iodine in the system caused interference if present in more than small amounts. Resorcinol was used to remove iodine when present. Resorcinol enhanced the diffusion current of cobalt so it was necessary to prepare a new calibration curve when using this reagent.

Nickel and cobalt have close-lying waves in most electrolyes. These two metals were well separated in a potassium iodide-pyridine electrolyte.

The potassium iodide electrolyte should reveal other interesting relationships and should offer greater flexibility to those confronted with cobalt and other metal analyses.

Hofferth, Roger A. An Investigation of the Validity of the American School Intelligence Tests. June, 1961. Pp. iv + 45. Series I, No. 811.

Committee: Dr. Rutherford B. Porter, Chairman, Dr. Charles W. Hardaway, Mr. Dewey J. Moore.

Problem: The purpose of the study was to determine the validity of the American School Intelligence Tests.

Method: In order to determine the validity of the American School Intelligence Tests (ASIT), the scores of 64 students in grades 4, 5 and 6 earned on the ASIT Intermediate Level at the Laboratory School of Indiana State Teachers College, Terre Haute, Indiana, were compared statistically with scores they had made previously on the Wechsler IntelligenceScale for Children (WISC). The same was done with 53 students enrolled in grades 7, 8 and 9 at the same school who took the Advanced form of the ASIT. A total of six scores (IQ's) was determined for each student (WISC Verbal, Performance and Full Scale IQ's and IQ's on ASIT Form D, Form E and a Composite IQ determined by combining the raw scores of Forms D and E and averaging them.) These scores were then entered on scattergrams and, by using the Pearson Product-Moment method, coefficients of correlation were computed between the various WISC and ASIT IQ's. Standard errors of the correlation along with standard deviations were then computed.

Finding:.. The findings of the study seem to be that the ASIT correlates about as highly with the WISC as have other group tests of mental ability. Also, it was found that the validity of the test does not appear to be increased by giving both forms of the ASIT as one test. At the Advanced level (grades 7, 8, 9) the correlations were .728 between Form D and the Verbal WISC, .696 between Form E and the Verbal WISC and .708 between the Composite Form and the Verbal WISC. Correlations were .605 between ASIT Form D and the Performance WISC, .699 between Form E and the Performance WISC, and .660 between the Composite Form and the Performance WISC. Correlations were .662 between the Form D of the ASIT and the Full Scale WISC IQ's, .740 between Form E and Full Scale WISC, and .682 between the Composite Form and WISC Full Scale.

At the Intermediate level (grades 4, 5, 6), coefficients of correlation were .650 between the Form D of the ASIT and the Verbal WISC, .645 between Form E and the Verbal WISC and .61 between the Composite Form of the ASIT and the Verbal WISC IQ's. Coefficients of correlation were .554 between the ASIT Form D and the Performance WISC, .479 between Form E and the Performance WISC and .457 between the Composite ASIT scores and the Performance WISC. The correlations were .691 between the Form

D ASIT and the Full Scale WISC, .557 between Form E and Full Scale WISC and .64 between the Composite Form of the ASIT and the Full Scale WISC.

Thus, it was seen that Form D of the ASIT seems to be more valid than the other forms at both the Intermediate and Advanced levels. It was further seen that the correlations between the various ASIT IQ's and the various WISC IQ's are about as high as the correlations between the WISC and other group tests of mental ability. It does appear, therefore, that the ASIT measures essentially the same thing as the WISC but apparently does not do so as well as the WISC. The primary use of the ASIT, then, will probably be for screening and will not replace the WISC.

A Summary of a Study of the Teaching of Oral Interpretation in Michigan, Selected Textbooks and Olis J. Aggertt Practices in Extra-Classroom Activities

Associate Professor of Speech, Indiana State College, Terre Haute, Indiana

(The following article is a summary of Dr. Aggertt's doctoral dissertation completed at Michigan State University, 1960.)

• THE PROBLEM was to study the elements of a philosophy for the teaching of oral interpretation as evolved in various textbooks in the nineteenth century and as revealed in five hundred representative textbooks in the twentieth century, to analyze the activities in oral interpretation conducted by the Michigan Inter-collegiate Speech League from 1933 through 1959, and to compare the findings from the textbooks with the practices analyzed.

The education implications of pragmatism were explored, and special reference was made to the teaching of oral interpretation in the light of contemporary developments in educational philosophy. An examination was made of the two basic schools of instruction in oral interpretation in the nineteenth century: the mechanical and the natural.

It was found that the mechanical school employed a faculty psychology and many fixed rules. It placed heavy emphasis upon the externals of the oral interpretion process. The first major exponent of this school, Dr. James Rush, in his book The Philosophy of the Human Voice, attempted to make a scientific approach of complete authority by the use of extensive terminology and many rules. He positively assured interpretative effectiveness upon the mastery of specific, fixed, measurable skills. The mechanical school was also seen in the teaching of Francois Delsarte, who sought to codify the characteristics of ideal oral interpretation, as such

codification is done in music. He dealt in fixed quantities and rules arranged on a mystical, triume basis.

The natural school, which voiced abhorrence of rules, existed throughout the nineteenth century but about 1900 received special impetus from Gestalt psychology, the Darwinian theory of individual differences, and the corollary development of pragmatism. At the turn of the century Silas Curry became the chief exponent of these new influences. Under the impetus of his leadership, the "think-the-thought" school was born. It eventually condemned all instruction in method and sought a completely "natural" approach to the teaching of oral interpretation.

The five twentieth century textbooks examined were Modern Literature for Oral Interpretation by Gertrude Johnson (1920). Reading Aloud by Wayland Maxfield Parrish (1932), The Art of Interpretative Speech by Charles H. Woolbert and Severina E. Nelson (1945). Oral Interpretation by Charlotte I. Lee (1952), and Communicative Reading by Otis J. Aggertt and Elbert R. Bowen (1956). On the basis of these books it was seen that, while to varying degrees today's approach is eclectic, a modern philosophy of the teaching of oral interpretation rejects faculty psychology, accepts the Gestalt, and emphasizes the concept that oral interpretation involves the whole person. Oral interpretation seems to be regarded today as a cooperative experience in communication rather than as a demonstration of skills. Impersonation is not thought a generally suitable interpretative mode. It seems to be the concensus of modern thought that instruction should be given in finding the meaning of literature and in expressing that meaning. Since each student is a distinct individual and every literary selection is different, there should be neither one specific procedure for instruction nor a model of interpretative effectiveness in to imitated. A modern philosophy of teaching oral interpretation suggests that rules be very few and extremely flexible. It is thought that effectiveness in oral interpretation can be determined only on the basis of communicative success; such effectiveness is not thought measureable in ratings or rankings.

In the light of the philosophical concepts found in the texts, analyses were made of the contests and festivals in the oral interpretation area conducted by the Michigan Intercollegiate Speech League in the aforementioned period. The contests, which were conducted from 1933 through 1950, were found highly competitive in many aspects of theory and practice. Audiences were found to have been largely hostile. The festivals, which took place from 1951 through 1959, more nearly approximated the cooperative, communicative ideal. Contest

conditions were found to have emphasized rigid rules, faculty psychology, imitation, memorization, and the concept of demonstrating skills. Festival conditions were found to have de-emphasized and often to have eliminated these factors. Contest efforts to measure and rank interpretative success were not found consistent with the philosophical concepts revealed in modern textbooks. Conversely the evaluation system of the festivals with no ratings or rankings was seen to be in keeping with the findings in the study of the texts.

In summary, it was generally concluded that festivals more nearly conform to the pragmatic educational philosophy as revealed in the texts than do contests. On the basis of the findings, it was recommended that the use of the festivals be continued, that those few aspects of the festivals reminiscent of the contests be eliminated, that larger numbers of students be employed in the festivals, and that increased use of the festival technique be made in other speech activity areas.

Philosophical Bases for Physical Education Experience Consistent with the Goals of American Education for High School Girls

Eleanor Forsythe

Chairman, Department of Women's Physical Education, Indiana State College, Terre Haute, Indiana

(This following article is a summary of Dr. Forsythe's doctoral dissertation completed at New York University, 1960.)

• THE PURPOSE of the study is to establish philosophical bases for the kinds of experiences which students should have in physical education in order for the subject to contribute to the realization of the goals of American education. The physical education program for girls in grades seven through twelve in the public schools of the nation is examined. The study embraces the basic assumption that physical education is a constituent part of American education and as such must be structured as a phase of the entire plan of the educational process. A sound basis for the program of physical education is essential in order that its fullest contribution may be made to the education of the individual.

The philosophical pattern of research is utilized throughout the study. One means of validation of the data is achieved by documentation from authorities in the areas of physical education and general education. Additional validation is submitted by applying criteria found to be appropriate for valid aims of American education which must fit into the basic and dominant ideal of American democracy.

Goals for American education for high school girls are selected from the many listings which have been developed by various learned persons, committees, and commissions. No effort is made to formulate new goals: rather goals which meet the needs for today's students are selected. The goals chosen for the study are related to the development of the individual to the limit of her own capacity, acquisition of a wide range of knowledges and skills, preparation for a vocation, development of a code of ethics for successful integration with society. preparation for marriage and family life, understanding of the democratic way of life and its responsibilities, development of resources for effective use of leisure time and appreciation of the creative aspects of life, understanding of the scientific method and the implication of scientific discoveries upon human welfare, and growth in the willingness to engender international understanding.

Concepts of physical education are established by recognizing areas of consistency between physical education and the goals of education. Validation of the relationship is presented and principles for physical education are derived from the concepts which have been shown to be compatible with the goals. The principles are supported by statements from authoritative literature in education, philosophy, anthropology, psychology, sociology, and physiology.

The principles provide the bases for the kinds of experiences which students should have in physical education in order to contribute to the realization of goals of American education for high school girls. The experiences which are described are presented in broad terms of the subject matter rather than the specific. Although one particular activity may utilize more fully the areas of experience than another may, all physical education activities should be structured to operate within the large areas of experiences: in learning to know and accept self, in relationships with other individuals in class situations, in relating to the environment in which physical education takes place, in appraisals, testing, evaluation, and guidance conferences, in participating in a wide range of skill-knowledge activities which result from interests and needs, in selfdirected activities, in socially structured democratic undertakings, and in understanding the total aspects of body education as related to utilization in life today and tomorrow.

The experiences relate to the development of the high school girl as an individual, as a member of society, and as a participating citizen of a democracy. No effort is made to prescribe the activities to be included in the program. Physical education skills of dancesport-games types are regarded as the means, rather than the ends, through which educational goals are achieved. The experiences which derive from the activities are the means through which development and growth take place. Responsibility for selection of the learning experiences carries with it the obligation for knowing and understanding the needs and capacities of the students in the program. The experiences are described for application in a school which accepts the belief of the organismic whole of the individual and the need for integration within society.

In physical education the body is the means of experiencing and experience is the means of learning. Interpretation of the experience results in a change in knowledges, skills, and attitudes which are integrated into larger related meanings called "understandings." Understandings are functional knowledges which result in changed behavior, related to body care, dance-sportgame activities, making friends, taking responsibility, and practicing democracy.

If the types of experiences proposed are utilized, then physical education will make its full contribution to the realization of the goals of American education for high school girls.

Book Reviews---

Programs for the Gifted: A Case Book in Secondary Education. (Fifteenth Yearbook of the John Dewey Society.) Edited by Samuel Everitt. New York: Harper and Brothers, 1961, pp. 299+xy, \$5.50.

The last two years have seen a deluge of books and articles dealing with the educational opportunities provided for the gifted student. This yearbook of the John Dewey Society is one of the best of the lot. Its contribution equals the preceding yearbooks of the society in excellence.

Programs for the Gifted follows the usual organization of yearbooks with each chapter written by a different author who is well qualified in the area within which he writes. The book is divided into four sections. The first is an over-view or orientation to the subject; the second, an examination of European school programs: the third, a description of some of the more successful programs to be found in our own country; and the fourth, some proposed guidelines that will be useful to the person who is interested in setting up high school programs for superior students.

The editor's opening chapter does an excellent job of presenting a picture of the place of the gifted individual in our society. Most of us are inclined to lay the failure to provide for and encourage the gifted at the school's doorstep. Mr. Everitt sees the problem in greater terms. The pressures within our society that push the individual toward conformity, that make "organization men" of all of us, are the same ones that stifle our efforts to develop the potential of our superior student. And to Mr. Everitt the presence of these forces makes the nurturing of our gifted individuals all the more imperative.

The chapters dealing with the European systems of education present a balanced view; they neither call for a direct copying of these plans nor a denunciation of them. The authors see the German schools as being more selective than ours; the English, more academically centered. The Russian school system is discussed, as it should be, as having different goals and greater public support. In one of the most succinct paragraphs in the book Goodwin Watson makes this comparison of the Russian schools with our own:

A fair conclusion is that most of the advantages of Russian schools over American schools lies not in pedagogical techniques but in the climate of public opinion. Any time the adult citizens of America want to give high priority to intellectual achievement in their own use of time, in selection of outstanding teachers, and in subsidies for scholarship, the public and private high schools will be more than ready to maintain high standards.

The examples of schools in this country that have developed programs for superior students are many and varied. The Germantown Friends School provides a good example of enrichment in a rural high school; the Ohio State University School's Core Program is an illustration of a program that cuts across traditional

Philosophy for American Education. By Kenneth H. Hansen. Englewood Cliffs, N. J.: Prentice-Hall, Inc., 1960, pp. 310+ix. \$5.50.

This book attempts to explore the basic issues of educational philosophy which underlie most current practices in education. It points out that the traditionally organized philosophical "systems" are likely to exist more in theory than in educational practice and that most educational institutions are operated with little attention to any definite "schools" of philosophy. The position is taken that in order to be of any value an educational philosophy must make a difference in the practical affairs of the school. Hence, the author points out, what we need is a philosophy definitely intended to clarify and motivate educational practice rather than one which is merely descriptive.

The introductory chapters are concerned with the meaning of philosophy, its major problems, and a brief summary of certain philosophical systems, especially idealism, realism, and pragmatism.

Each one of the three systems is evaluated in terms of what the author considers to be twentieth century needs. He concludes that none of these systems is completely adequate and suggests that a new philosophy subject matter lines. The Portland, Oregon experiment in special classes for the gifted is an excellent example of limited homogeneous grouping; and a highly specialized program for the gifted is illustrated by the Bronx Science High School. The most comprehensive program discussed is that of the Evanston, Illinois, school system. There honors classes, advanced placement, and special sections of regular classes are combined for better instruction and guidance of the superior students. Such extensive offerings are possible in a large high school which has ample materials, an adequate plant, and a well-trained, professional staff.

Since the advent of Sputnik our concern for caring for our more able students has received renewed emphasis. However, most of our work in the area has been arm-chair theorizing. What is needed is more actual program planning and experimentation. Books such as Programs for the Gifted help to meet this need by providing specific suggestions and examples of how such programs can be brought into being.

TOM C. VENABLE, Professor of Education and Psychology Indiana State College

be developed for American education. Such a philosophy of education, he says, can best be developed if we do the following four things: (1) We must understand the major philosophical systems which have been both the outgrowth of previous cultures and the guideposts for these cultures, especially as they apply to education. (2) We must assess and appraise the contributions of these other philosophical systems which have meant so much to the development of Western civilization and have been so long the foundations on which our educational effort is based. (3) We must examine current educational problems and strip them down to their fundamental issues. (4) We must develop the outline of a believable, respectable, tenable, and satisfying philosophy of education.

The remainder of the book consists largely in an elaboration of these four suggestions. Chapters IV and V are concerned with conflicts, contributions, and challenges in established philosophical systems. In Chapters VI through XV various educational problems and issues are analyzed in the light and these and other philosophical systems. The following specific topics are considered in this way: Educational Philosophy and Religious Belief; Educational Philosophy and Science; Educational Aims as Values; What is Man?; Ways and Means in Education; The School and Social Control; Education and Social Problems; The Limitations

of Education: The Educational Leader in Teaching and School Administration.

In Chapter XVI the need for a philosophical system adequate to serve present-day purposes is reiterated. In the concluding chapter the author proposes his own version of such a system, which he calls empirical idealism. He discusses the ontology, epistemology, and axiology of the proposed system in considerable detail. showing how it differs from each of the chief older systems. As described, "empirical idealism" seems very similar to a modified form of pragmatism supplemented

BYRON L. WESTFALL., Professor of Education Indiana State College

Terre Haute, Indiana

teaching, and evaluation.

Education.

Student Teaching in a Secondary School and Guiding a Student Teacher by Thomas J. Brown. New York: Harper and Brothers. 1960, 286 pp. (Text—217 pp.+viii. Manual—69+ix) \$3.75.

This book is a paperback which contains both a text addressed to the student teacher and a manual addressed to his cooperating teacher. The manual can be detached to serve as a separate volume. The text and the manual each has a table of contents, an index, bibliography, and appendixes.

In the Preface, the author makes three statements which provide the vantage point from which to examine the book:

- "This book's claim to distinctiveness is its emphasis on planning by both the student teacher and the cooperating teacher as they work together in the student teaching situation."
- "A second emphasis is on the important role the cooperating teacher plays in a good student teaching experience."
- 3. "Rather than attempt to 'cover the waterfront' by treating all aspects of teaching—a task inadequately done in any one book and usually covered in other professional courses—this book, after its initial introductory chapters on human relations and student teacher responsibility, devotes eight of its thirteen chapters to the problem of classroom control, its relation to teaching competence, and the improvement of learning and classroom control through planning."

Six of the thirteen chapters in the text pertain to some aspects of planning. Two of the six chapters, "How to Plan A Lesson" and "Unit and Pupil-Teacher Planning" are general and very similar to those found in most textbooks dealing with secondary teaching. One chapter attempts to show the student teacher how to adjust his planning to seven classroom methods (the author's own classification) which he might find in operation; but the attempt is too brief and too cluttered

(approximately two pages per type) to succeed. Three chapters make a genuine contribution by pointing out how the student teacher can improve his planning through his experiences in observation, participation,

by empirically derived ideals which serve as standards

be a good reference for a course in Philosophy of

The book contains many excellent ideas and would

for judging values and as guides for action.

In the text addressed to the student teacher, the author assumes the attitude of an experienced teacher who is advising the novice. To enhance the atmosphere, he uses the second person singular: "Ready or not, you must enter the school in which you are scheduled to do your student teaching." In addition, he uses much anecdotal material gathered from previous student teachers. He is thus able to establish rapport with student teachers, who often feel a need for advice from a big brother.

The author correctly recognizes that classroom control is an important factor in student teaching, and he offers several suggestions which are sufficiently specific to allow the student teacher to act upon them. Some of his advice will not meet the approval of all teachers, however. For example, in the chapter on discipline, he leaves the impression that student teachers who trust students are naive and soon to be disillustioned. And later in the same chapter, he seems to approve of a student teacher's losing his temper.

The choice against "covering the waterfront" meets this reviewer's approval, and generally the book sticks to material which has been found to be of the greatest pertinence in student teaching. A question could be raised about the inclusion of two chapters which deal with locating a permanent position. This material, although important, can probably be better treated elsewhere.

In constrast to the text, which offers specific suggestions to the student teacher, the manual for the cooperating teacher is in general difficult to put into action: "The cooperating teacher should try to create an attitude toward his student teacher that is neither

dogmatic nor flabby, neither heedless nor fawning, neither dominant nor withdrawn."

Much of the manual seems to be an argument designed to persuade a potential cooperating teacher that a student teacher in neither frightening nor impossible. The major value of the manual lies in the appendixes, which contain anecdotal accounts of a cooperating teacher's work with a student teacher, checklists, illustrative lesson plans, and forms for evaluating the student teacher. This reviewer recommends that the two volumes be left intact so that the cooperating teacher can read what has been suggested to the student teacher, and vice versa.

Analytic Geometry and Calculus. By Frank L. Jusyli. Hartford, Connecticut: Prentice-Hall, Inc., 1961, pp. 348, \$6.75.

This book was written primarily: "(1) for the lay reader who wishes to increase his understanding of the contemporary developments in science and engineering through a more complete knowledge of mathematics; and (2) the reader currently working in a technical or industrial field who needs to refresh his mathematical background to keep pace with the growth of his job."

This purpose is met in a somewhat detailed classical approach. The topics of the calculus are presented in a normal systematic approach. Each topic is introduced and discussed with a graphical approach. Then numerous examples, with their solutions, are thoroughly discussed. This is the strongest point of the book and perhaps a weakness also as the explanations are often quite wordy and detailed.

The Futilitarian Society by William J. Newman. New York: George Braziller, 1961. pp. 412. \$6.00.

Not since Vernon L. Parrington's Main Currents in American Thought has any American conducted such a thorough analysis of his nation's conservatism from a liberal point of view as William J. Newman has done in this book. Unlike Parrington, however, he has confined himself to the current scene, particularly the 1950's, and he has made his analysis from a somewhat more articulate point of view.

Newman first describes the "mind and face" of American conservatism, pointing out both the Old and New types, the former goin gback to nineteenth century liberalism (as with William Chamberlin, Felix Morley, James Burnham and Senator Goldwater) and the latter going farther back to Burke's Reflections on the Revolution in France. Among the latter group, he distinguishes In summary, this book, in spite of some weak points, will be helpful to most student teachers and their cooperating teachers. It could also be a starting point for a committee charged with developing a student teacher manual to apply to their own institution.

THOMAS ARTHUR PHILLIPS. Supervisor of Student Teaching on the Secondary Level Indiana State College

The two chapters on plane analytical geometry are primarily review work. They cover the major topics with detailed discussion, illustrations, and selected exercises. The remaining thirteen chapters form the elements of a beginning course of the calculus. They follow the pattern established in chapters one and two. After each major topic there is a list of carefully selected exercises. The book stresses application and techniques rather than rigorous theory.

It is the opinion of this reviewer that the author has successfully met his purpose. This necessarily limits the usefulness of the book as a general text.

ROBERT L. KELLEMS Instructor, Dept. of Mathematics, Indiana State College

Russel Kirk, the leader of the school; Peter Viereck; and Clinton Rossiter. Succeeding chapters deal with the "public philosophy" of Walter Lippmann, the relationship of the businessman to modern American conservatism, and the "conservative mood" as exemplified in Louis Hartz, Daniel Boorstin, and Daniel Bell, as well as in "Subtopia" (the non-utopian "society" of the suburbs) and in the officers of Time, Inc., which was the starting point of Max Ways' Beyond Survival.

Newman's main philosophical point is that every conservative searches for a place of rest, a fixed society based on eternal truths, one that will crush by its "essence" any freedom to face new problems in a new way, any freedom to innovate, which man has. He shows that Old and New Conservatives are alike in desiring such a place of rest, though the New Conservatives criticise the Old for finding their "Golden Age" in nineteenth-century liberal America instead of in the

agricultural society of Jefferson. He admits that the businessman, attacked by New Conservatives and Liberals alike, has a difficult time, but comes finally to the conclusion that, as conservative thinkers point out, the businessman must, because of his devotion to profits and despite his role as technological innovator, endorse the society of nineteenth century liberalism, for to do otherwise would endanger his way of life. He sees the attempt to deny a liberal-conservative dichotomy in America, as Hartz and Boorstin have done, as simply turning away from the nation's problems and hence a part of the "conservative mood." The statusseeking of the suburbs is also, to Newman, simply another aspect of movement reduced to mechanism (the clock-symbol of the eighteenth century), and what May Ways, with Time, Inc., sees as "beyond survival" is only a point of fixity, a "national purpose" so defined as to limit once and for all man's freedom to innovate:

What is the futilitarian society? It is a society that will not attempt to solve the problems it faces and often refuses even to face its problems because it fears freedom it will not allow the experimentation, change, discovery, and adventure that are necessary to the solution of its problems. Thus it avoids the possibilities before it by refusing to asknowledge change and the freedom that makes change possible.

Elements of General Chemistry, By Jay A. King, Kings College: Prentice-Hall, Inc., 1960, pp. 466. \$6.95.

The author of this one semester text attempts to develop a foundation for potential non-science majors and a terminal course for the regular non-science major. Emphasis is placed upon the reasonableness and logical unity of chemistry along with the experimental approach which has led to the presently accepted theories.

Indication is given in the table of contents that the topics included are the usual ones found in a beginning text. A unique feature is the use of short chapters on specific introductory mathematics before the work on gases and on ions.

The questions found at the end of each chapter are excellent, usually requiring some utilization of, and

Instead it attempts to limit man to what he has always been, to what his eternal essence tells him to be.

Like all liberals, Newman denies "original sin" and sees man's freedom as limited to rational choice. Also, like other liberals, he demonstrates great faith in man's powers to meet new problems creatively, to perpetually change that part of his essence which is derived from his institutions-and to change this essence for the better. He does not, however, emphasize that man's needs-food, clothing, shelter, a sexual outlet, and freedom of movement-have, throughout history, been pretty much the same, and hence he shies away from the utopian possibility that someday man's institutions will be perfectly adjusted to these needs and the need for innovation will end. This, however, is a mild criticism, for any such utopia is not within range at the present time.

No American, liberal or conservative, should deny himself the priviledge of reading this book. It is, for all those who desire to think, extremely useful in placing American's present intellectual thought in perspective.

ROBERT P. SAALBACH. Department of English Indiana State College

synthesis from the items discussed, rather than rote memory.

The format is very satisfactory with sufficient common examples to clarify new concepts for the beginner. This reviewer recently used this book for sixty junior and senior high school teachers in a National Science Foundation Institute. With slight exception these people had no college chemistry in their backgrounds and reported surprising enthusiasm for this text. They especially were intrigued with the personal I, we, etc., used successfully throughout the book. Diagrams and illustrations, they felt, were adequate and not too complex for their understanding.

WILLIAM G. KESSEL. Associate Professor of Chemistry, Indiana State College

THE LEGAL STATUS OF COMPULSORY SCHOOL ATTENDANCE IN INDIANA— Continued from page 33

ment of the cause and not the symptom is indicated here in providing some type of special services for those needy students.

If the case study method of problem solving is used by more and more professionally trained workers, the problem of chronic absenteeism will be helped considerably in the future. Through this method, present day attendance officers can become school social workers in the true sense of the word and we will have progressed along the road to improved education.

